

# **CGA Update & DIRT Report**

**Alabama PUC**

**December 5, 2018**

Montgomery, AL

Khrysanne Kerr

Vice President of Communications

# Overview

- About CGA
- DIRT!
- Damage Prevention Successes
- Future of Damage Prevention



# History of CGA

- 1998: Transportation Equity Act for the 21<sup>st</sup> Century directed USDOT to conduct a nationwide study of best practices in place to enhance worker safety, protect vital underground infrastructure and ensure public safety during excavation activities.
- 1999: Completed study published with consensus support from all 160 stakeholders that participated in the study, and included 132 Best Practices.
- 2000: Common Ground Alliance established to support industry efforts to continue the implementation and development of the Damage Prevention Best Practices.

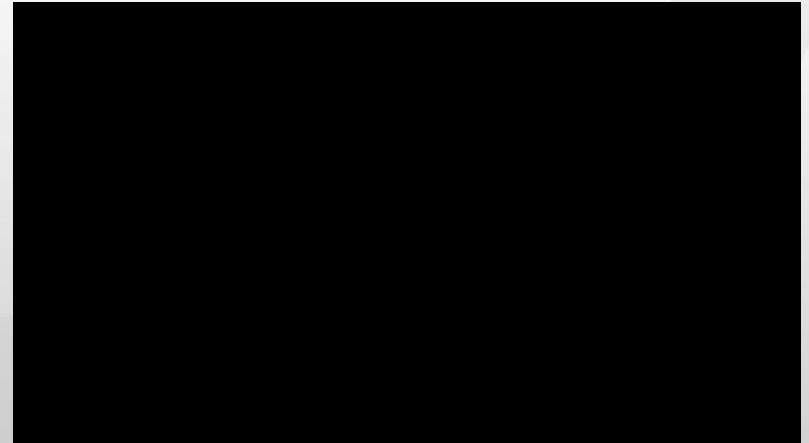


## Mission

The Common Ground Alliance is dedicated to preventing damage to underground utility infrastructure and protecting those who live and work near these important assets through the shared responsibility of our stakeholders.

# CGA Today

- Over 1,700 members
- Almost 240 member organizations/companies
- 70 sponsors (Bronze, Silver, Gold & Platinum)
- 16 damage prevention stakeholder groups
- 6 staff members
- 7 working committees
- 20 board members



# Damage Prevention Stakeholders



**One Call**

**Gas Transmission  
Gas Distribution  
Oil**

**Telecommunications  
Electric  
Public Works**

**Locators**

**Excavators  
Road Builders**

**State Regulators**

**Engineering**

**Equipment**

**Insurance**

**Emergency Services**

**Railroad**

# **Using Data to Measure Impact**

# DIRT Report Root Cause Grouping

Group	Root Cause
<b>Excavation practices not sufficient</b>	<ul style="list-style-type: none"> <li>• Failure to maintain clearance</li> <li>• Failure to support exposed facilities</li> <li>• Failure to use hand tools where required</li> <li>• Failure to test hole (pot-hole)</li> <li>• Improper backfill practices</li> <li>• Failure to maintain marks</li> <li>• Excavation practices not sufficient (other)</li> </ul>
<b>Notification NOT made</b>	<ul style="list-style-type: none"> <li>• No notification made to one call center</li> </ul>
<b>Locating practices not sufficient</b>	<ul style="list-style-type: none"> <li>• Incorrect facility records/maps</li> <li>• Facility marking or location not sufficient</li> <li>• Facility was not located or marked</li> <li>• Facility could not be found or located</li> </ul>
<b>Notification practices not sufficient</b>	<ul style="list-style-type: none"> <li>• Notification of one call center made but not sufficient</li> <li>• Wrong information provided to one call center</li> </ul>
<b>Miscellaneous root cause</b>	<ul style="list-style-type: none"> <li>• Abandoned</li> <li>• One call center error</li> <li>• Deteriorated facility</li> <li>• Previous damage</li> </ul>



# Damage Information Reporting Tool (DIRT)

- Collects damage and near miss data
- Voluntary
- Statistically valid
  - Professional Analysis
  - Report Writer
- Managed by a proven committee process

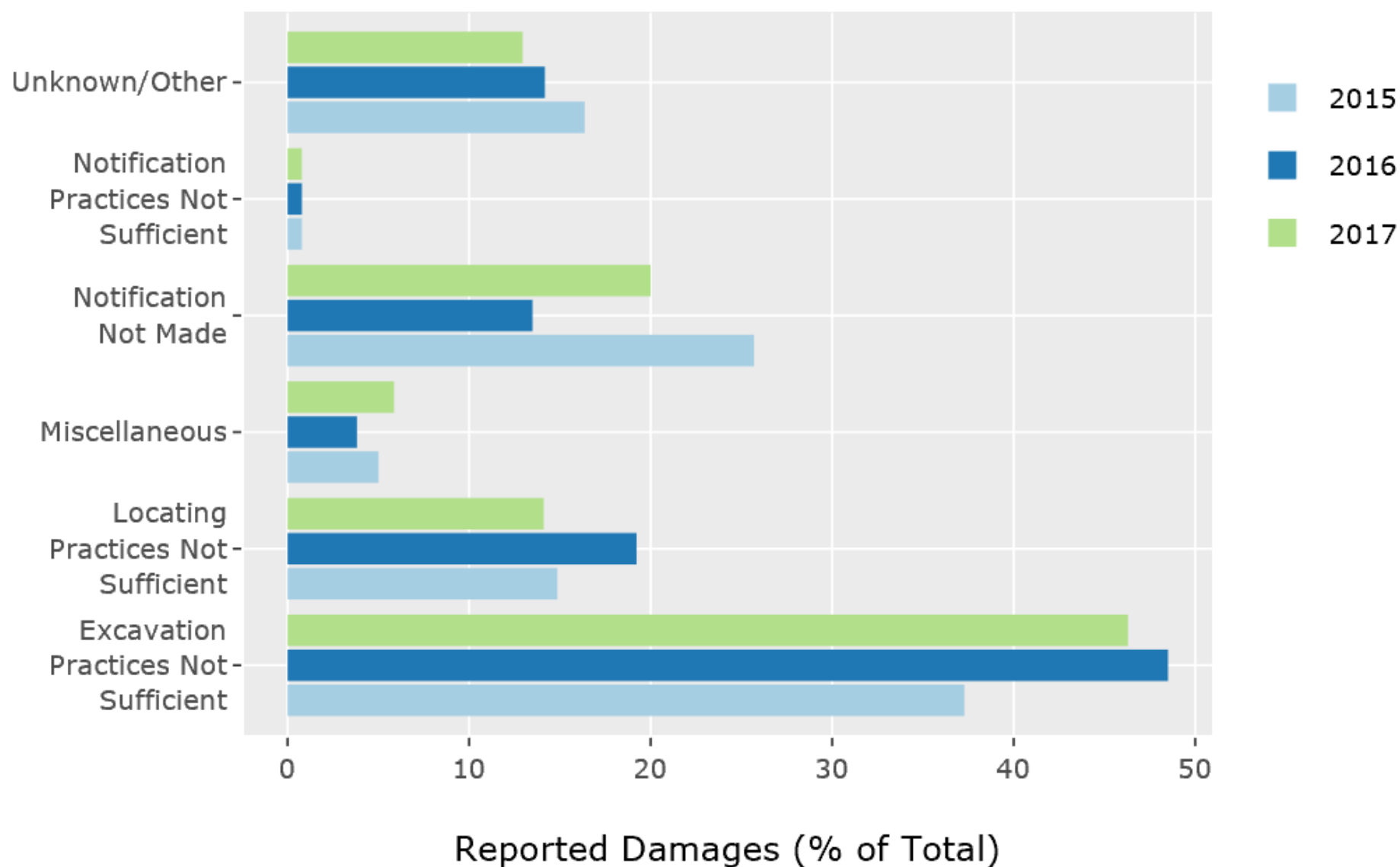


## 2017 DIRT Report Highlights

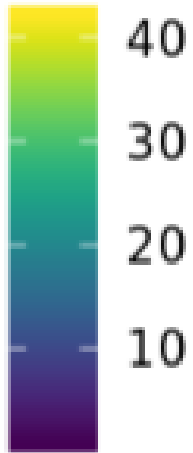
- Published September 18, 2018
- R Shiny Dashboard
- Recalculated damage estimate



## Root Cause Group by Year

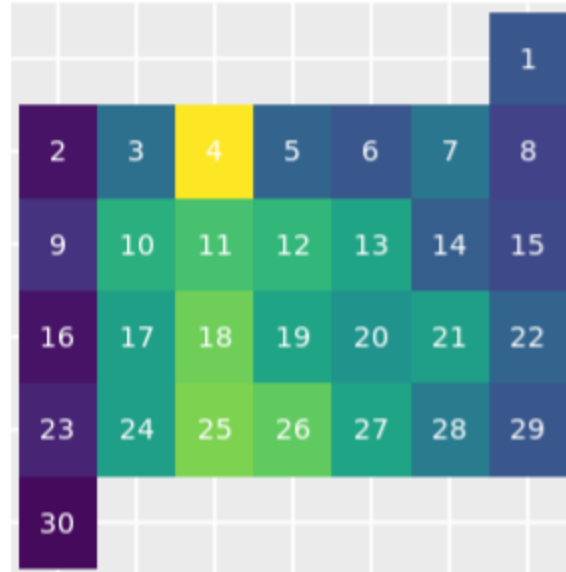


## Unique Damages



Apr

Sun Mon Tue Wed Thu Fri Sat



## Damage Heat Map

# Alabama 811

---

## State Summary



TOTAL U...  
**5,602**



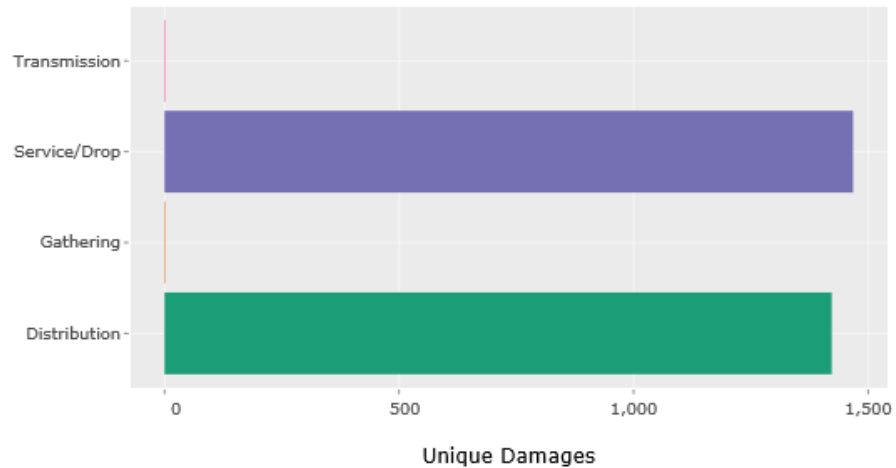
INCREASE...  
**16 %**



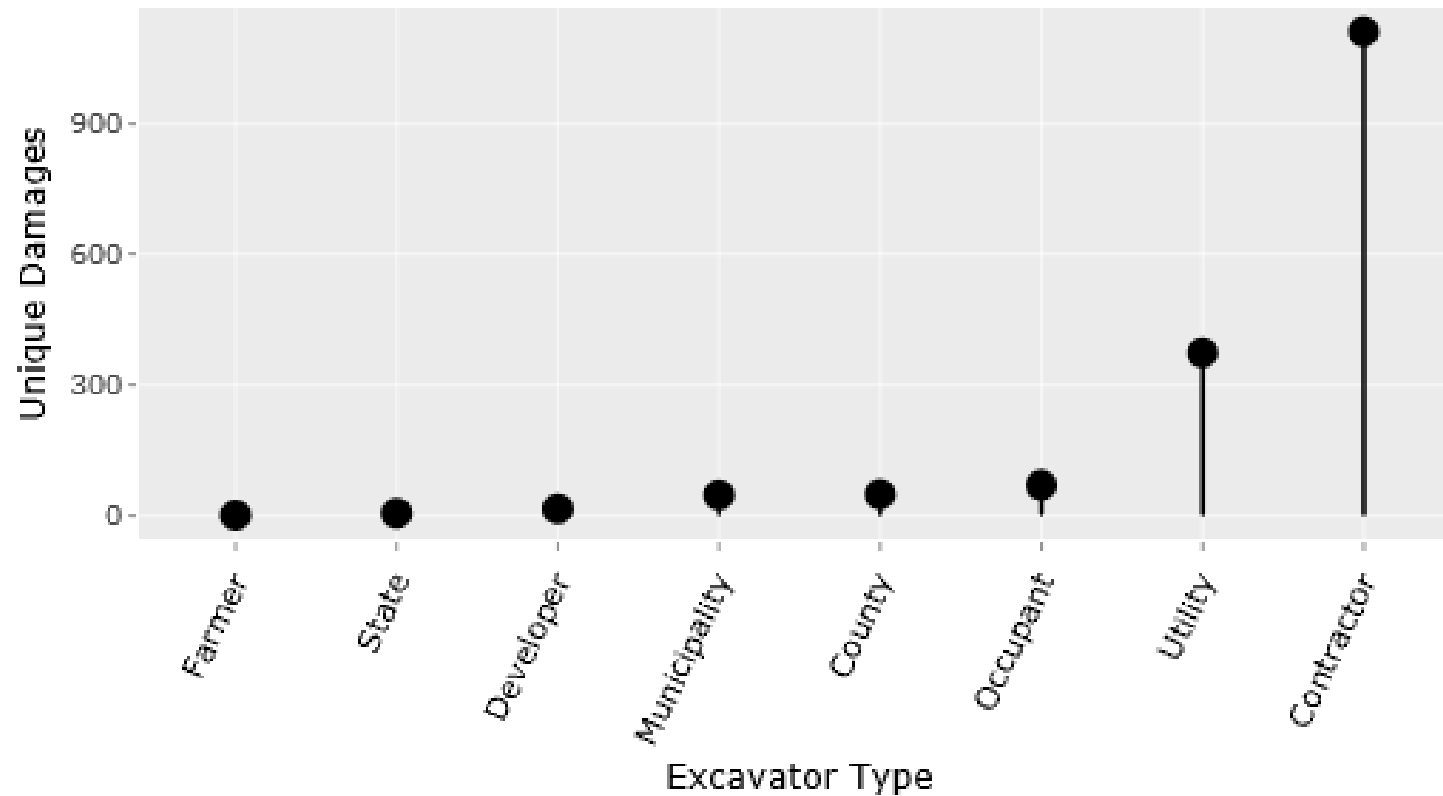
TICKET T...  
**1.6**

# 2017 DIRT Report

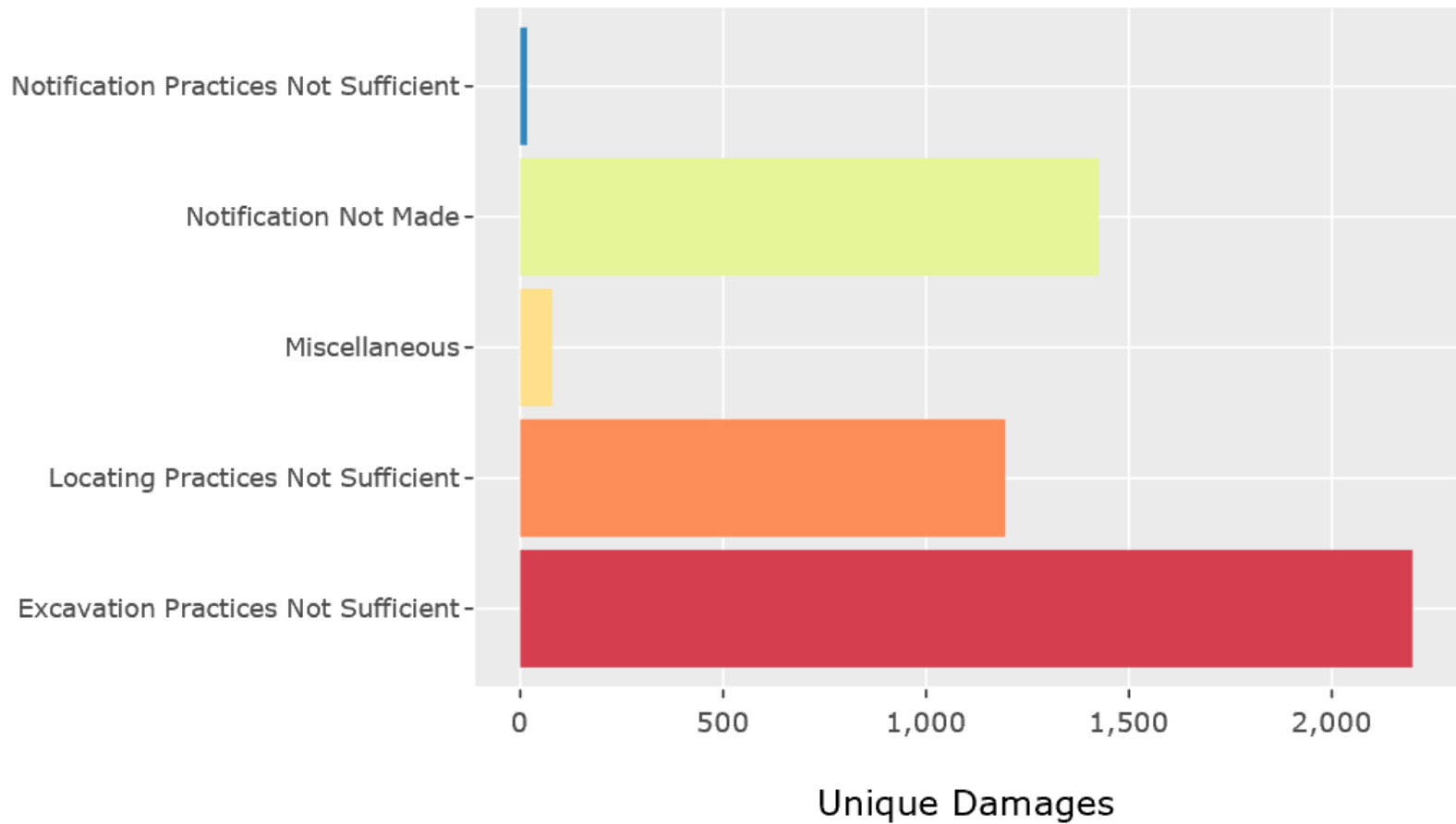
Unique Damages by Facility Affected



## Unique Damages by Excavator Type

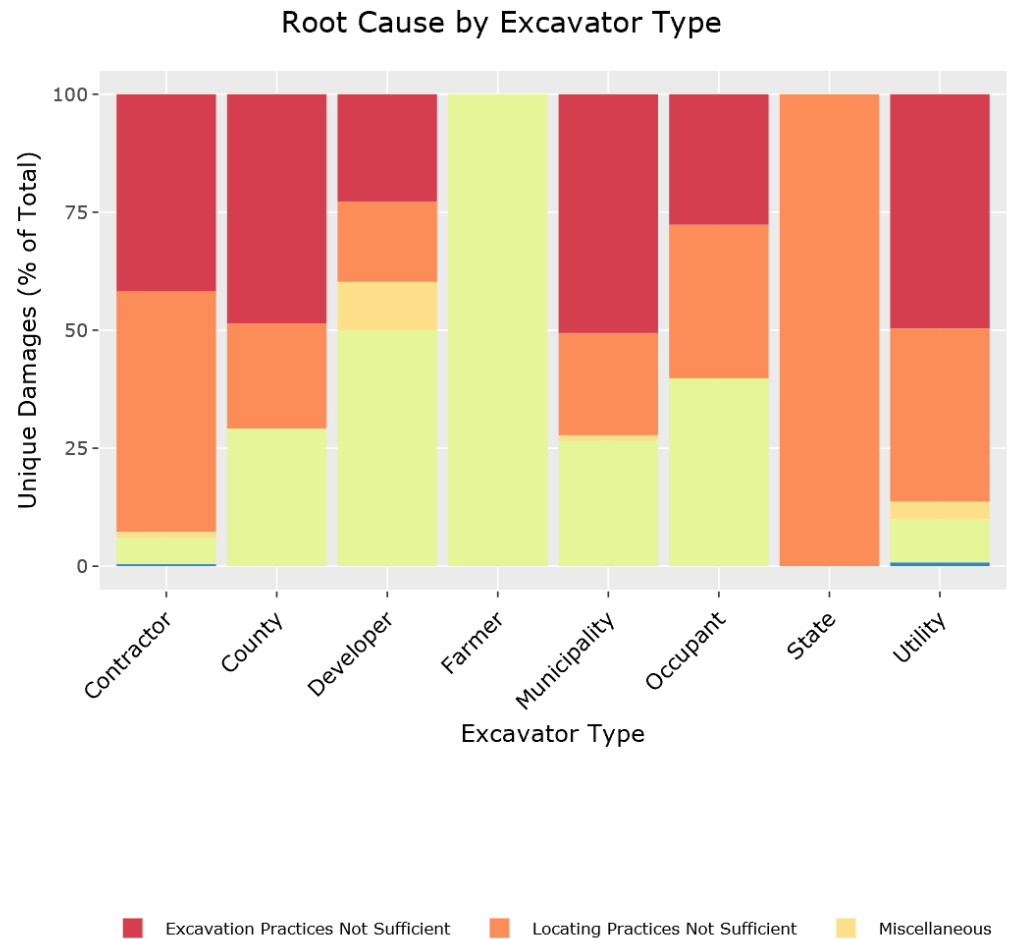


## Unique Damages by Root Cause





# 2017 DIRT Report



# Small Projects Big Disruptions

Damages that occurred on a weekend were nearly twice as likely to have involved hand tools (shovels, post-hole diggers, etc.) than those that occurred on a weekday.



2017 DIRT Report

[CommonGroundAlliance.com/DIRT](http://CommonGroundAlliance.com/DIRT)



# Half of All Damages Occur in Summer

50 percent of reported damages occurred between June and September in 2017.







# Hand Tools

## Can Damage Unmarked Gas Lines

More than 80 percent of “no call” damages involving hand tools damaged natural gas facilities.

[CommonGroundAlliance.com/DIRT](http://CommonGroundAlliance.com/DIRT)

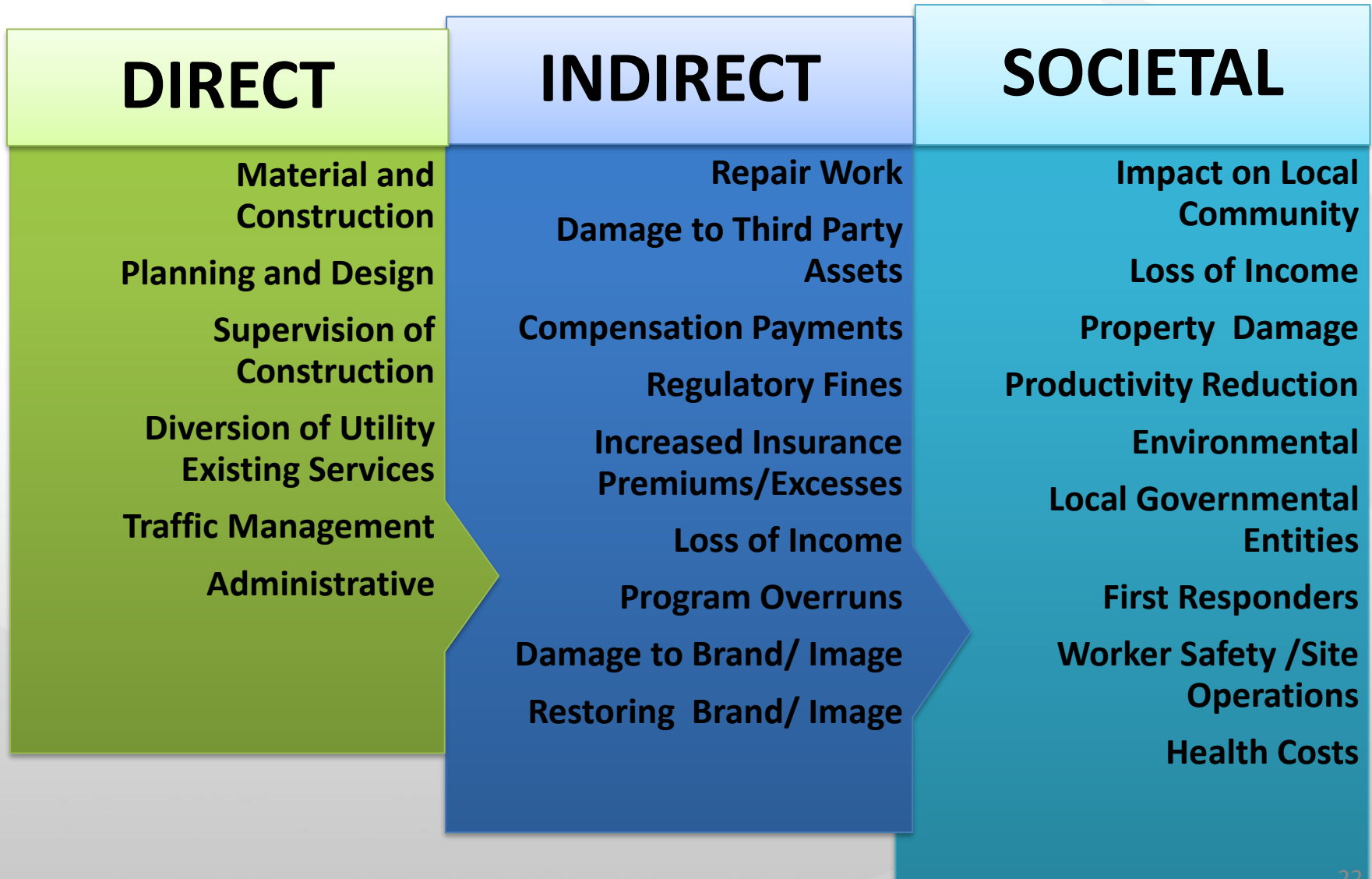


# PHMSA Statistics for Gas Distribution

<https://www.phmsa.dot.gov/data-and-statistics/pipeline/pipeline-incident-flagged-files>

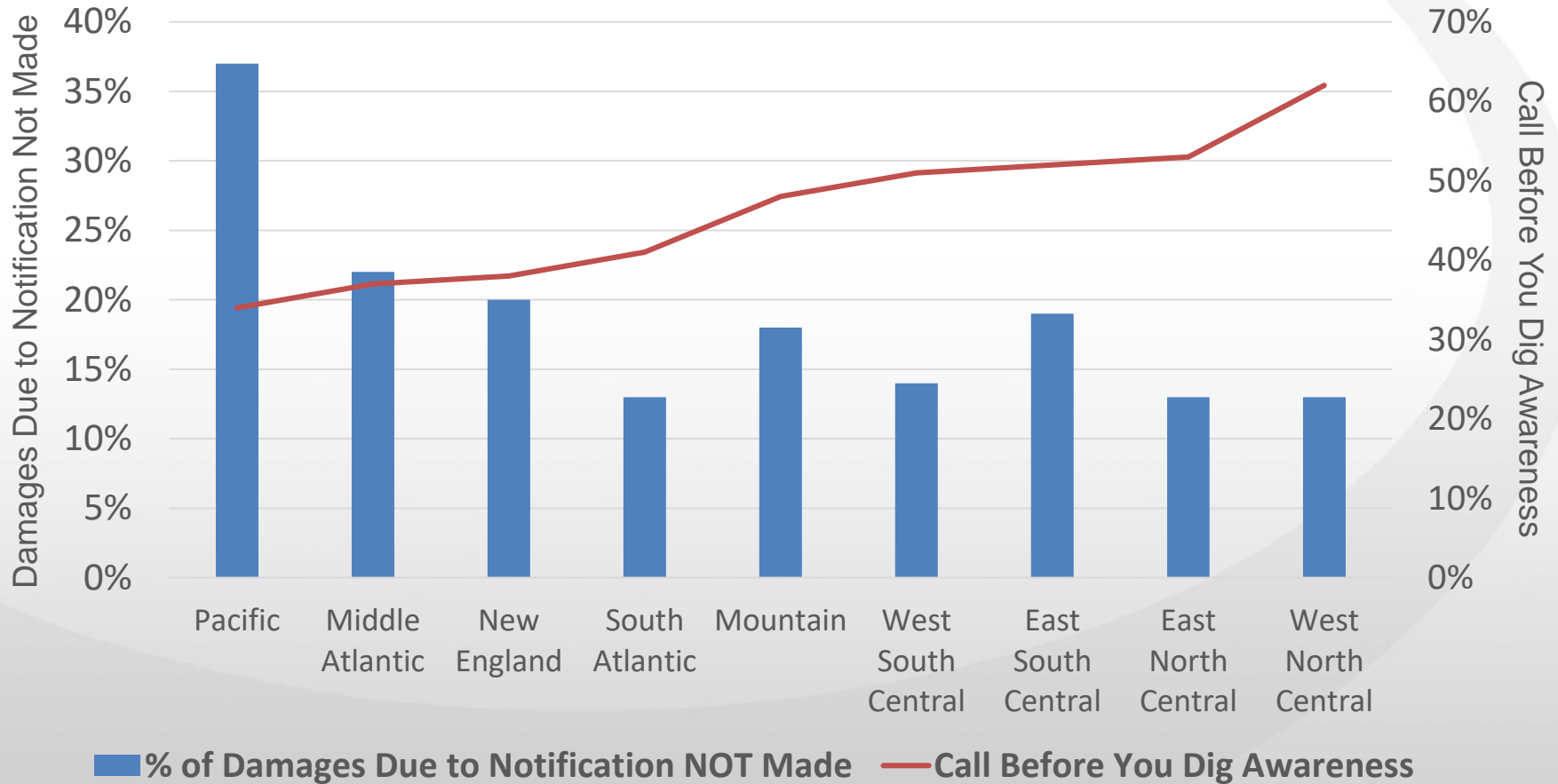
<b>Years 2010 - 2017</b>	<b>Total</b>	<b>Average per Year</b>
<b>Fatalities</b>	12	1.5
<b>Injuries</b>	79	9.875
<b>Number of general public</b>	5,333	667
<b>Estimated cost operator paid for property damage</b>	\$ 80,627,817	\$ 10,078,477
<b>Estimated cost of gas released (commodity lost)</b>	\$ 1,771,717	\$ 221,465
<b>Estimated cost of operator property damage/repair</b>	\$ 9,008,824	\$ 1,126,103
<b>Estimated cost of operator's emergency response</b>	\$ 6,032,792	\$ 754,099
<b>Estimated cost of property damage (other)</b>	\$ 7,989,181	\$ 998,648
<b>TOTAL</b>	<b>\$ 105,430,331</b>	<b>\$ 13,178,791</b>

# Utility Strike Cost Indicators



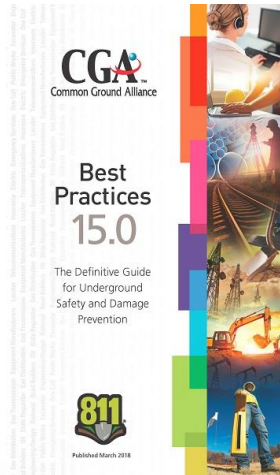
# **The Effect of Damage Prevention Programs**

# Awareness vs Damages Due to Notification NOT Made





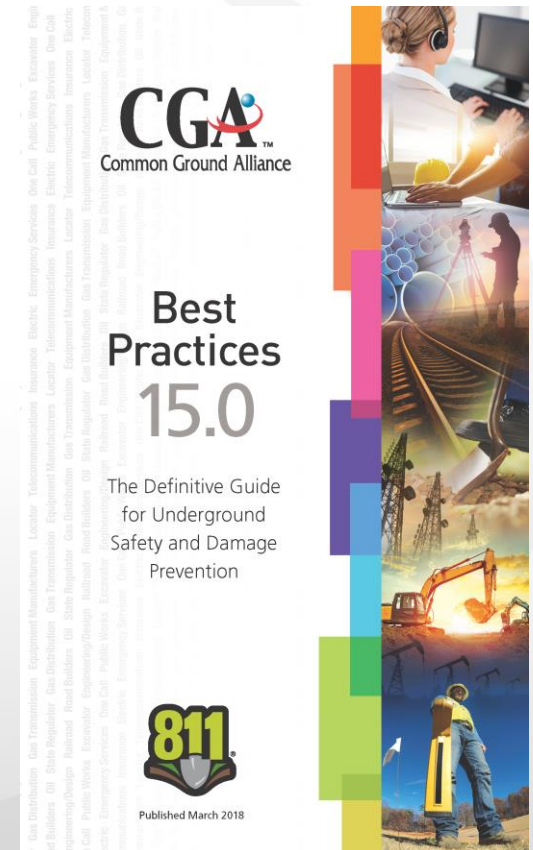
# CGA Core Programs



- Best Practices
- 811 / Damage Prevention Awareness
- Technology
- Data Reporting and Evaluation (DIRT)
- Stakeholder Outreach

# Best Practices

- Version 15.0 published March 2018
- Approximately 170 practices developed on consensus basis
- Many have become law
- Living document
- Currently 6 proposals under review by Best Practices Committee
- Distribution of 12,000 annually
- Available online with over 50,000 pageviews annually





# Best Practice Navigation

---

## Key

---

-  One Call Center
-  Facility Owner
-  Excavator
-  Locator
-  Project Owner
-  Designer

# New Practice for 2018

## Best Practices 15.0 -- New Practices and Modifications

During 2017, the CGA added and amended multiple practices that appear in Version 15.0. The following modifications were approved by the Best Practices Committee and CGA Board in 2017:

- › New Practice 3-31, *Enhanced Positive Response*
- › Modification to practice 5-2, *White Lining*

A review of all changes to the Best Practices can also be viewed at <http://commongroundalliance.com/best-practices-guide>.

# Chapters

---

- 2. Planning and Design
- 3. One Call Center
- 4. Locating and Marking
- 5. Excavation
- 6. Mapping
- 7. Compliance
- 8. Public Education and Awareness
- 9. Reporting and Evaluation
- 10. Miscellaneous

# Submit a Proposal



Become a Member Login



About Us

Membership

Damage Prevention

Programs

Events

Media & Reports

Search

GO

## 1. Introduction

SHARETHIS

Home > Best Practices Guide > 1. Introduction > Best Practices 15.0 -- New Practices and Modifications

### Best Practices Guide

- > Terms and Conditions of Use
- > 1. Introduction
  - > History of the Common Ground Alliance
  - > Establishment of the Common Ground Alliance
  - > CGA Today
  - > Best Practices Manual
  - > Best Practices 15.0 -- New Practices and

### Best Practices 15.0 -- New Practices and Modifications

During 2017, the CGA added and amended multiple practices that appear in Version 15.0. The following modifications were approved by the Best Practices Committee and CGA Board in 2017:

- > New Practice 3-31, *Enhanced Positive Response*
- > Modification to practice 5-2, *White Lining*

A review of all changes to the Best Practices can also be viewed at <http://commongroundalliance.com/best-practices-guide>.

### Key

- One Call Center
- Facility Owner
- Excavator
- Locator
- Project Owner
- Designer



SUBMIT NEW BEST PRACTICE

# Submit a Proposal

## Proposal Form - Best Practice

SHARETHIS

Home > Programs > Programs

811

Best Practices

Damage Information  
Reporting Tool (DIRT)

One Call Systems

Regional Partners

Stakeholder Advocacy

Technology


### Proposal Form - Best Practice

The form below allows CGA members and stakeholders to submit **new** best practice proposals or **revisions** to existing best practices. Once submitted, the information below will be shared with CGA staff and Best Practices Committee team members for review and consideration. For a complete overview of the Best Practices process, visit the [proposal and review process page](#).



Name \*

Date

Month  Day  Year  

Affiliation (Company or Organization)

Phone

Email \*

Please let us know if you are submitting a new practice proposal or revision to an existing practice. \*

☐ New Proposal - This is a proposal for a new best practice.

# On the Horizon

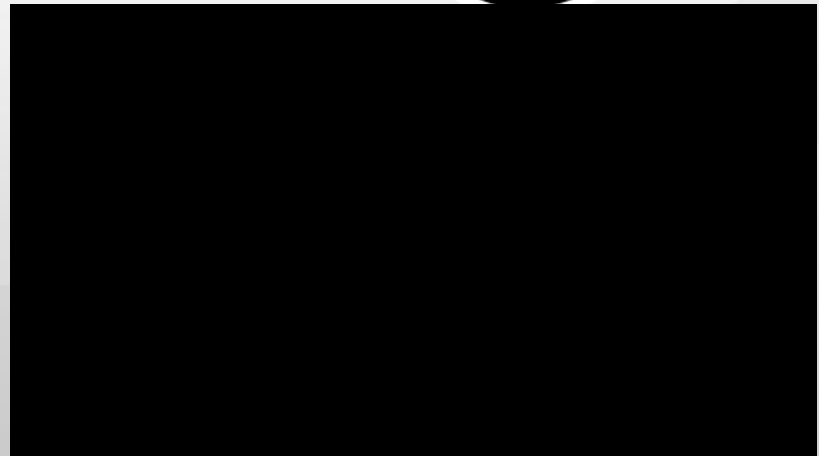
- Mapping Proposed Facilities
- Cross Bore Determination and Mitigation
- Abandoned Lines
- Locator Training Accreditation
- Private Facilities



# 811 / Safe Digging Process

Reduce damages by

- Increasing awareness of 811
- Driving homeowners/ excavators to notify the one call center prior to digging



## ABOUT THIS RESEARCH

### OBJECTIVE

The objective of this study was to measure:

- General awareness of call before you dig (CBYD) services
- Unaided and aided awareness of 811
- Awareness of 811 advertising
- Prior use and future intent to use call before you dig services

### APPROACH

**Sampling:** n=1805 adults 18+ throughout the U.S. and evenly distributed across the nine census regions (~n=200 per region)

- n=1,301 respondents took the survey online
- n=243 respondents took the survey via landline telephone
- n=261 respondents took the survey via mobile telephone

*Final survey results have been weighted by region according to actual population distribution and by methodology*

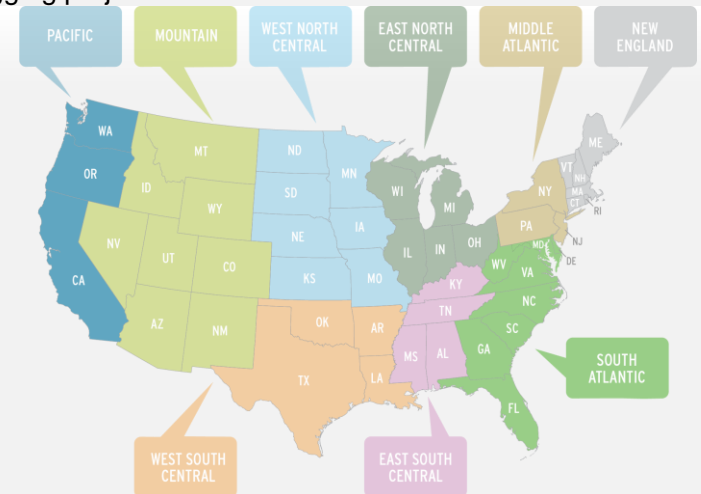
**Margin of error for nationwide / total sample:**  $\pm 2.3$

**Field dates:** June 19-30, 2018

*Data from the 2018 One Call Center survey and an audit of One Call Center logos is also referenced.*

### ABOUT THE SAMPLE: ACTIVE DIGGERS

- 19% of all survey respondents say they have done a DIY digging project in the past 12 months
- 70% of all survey respondents say their primary residence has a yard they are responsible for maintaining
- 13% of all survey respondents say they are planning a DIY digging project in the next 12 months. Another 8% of



## EXECUTIVE SUMMARY

**Overall, awareness of call before you dig and 811 remain relatively consistent year on year.**

*Almost half (48%) of respondents say they are aware of call before you dig, an increase of 3-points since 2017. However, awareness of 811 aided (36%) and unaided (7%) decrease slightly.*

**Over one-third (34%) of respondents have seen or heard 811 advertising, in line with 2017 findings (36%).**

*While traditional media such as TV (58%), radio (31%), and billboards (25%) are most commonly recalled when asking about advertisements, a quarter of respondents note seeing utility bill inserts (26%) and hearing from utility companies (24%).*

**Usage of 811 increases slightly to 28% among those familiar with 811 and an additional 16% of respondents not familiar with 811 or who have not called 811 in the past say they have called or gone online to have their utility lines marked.**

*The reason for not contacting 811 and call before you dig services can be largely attributed to respondents not completing digging projects (48%). Only 13% of respondents who did not 811 or use call before they dig say they were not aware marking was necessary or didn't think to call ahead.*

**Almost two-thirds (64%) of respondents say they are likely to contact 811 before starting a digging project in the future.**

*Respondents who are planning a digging project are most likely to contact the service (83%), followed by those who have completed a previous project (78%). This important finding illustrates the value of 811 is most recognized by those who need the service.*

**Calling 811 is the preferred method when reaching out to have utility lines marked for a strong majority of respondents (70%).**

*Online service is still important, 19% say they would "go online" and this increases significantly among millennials (27%).*

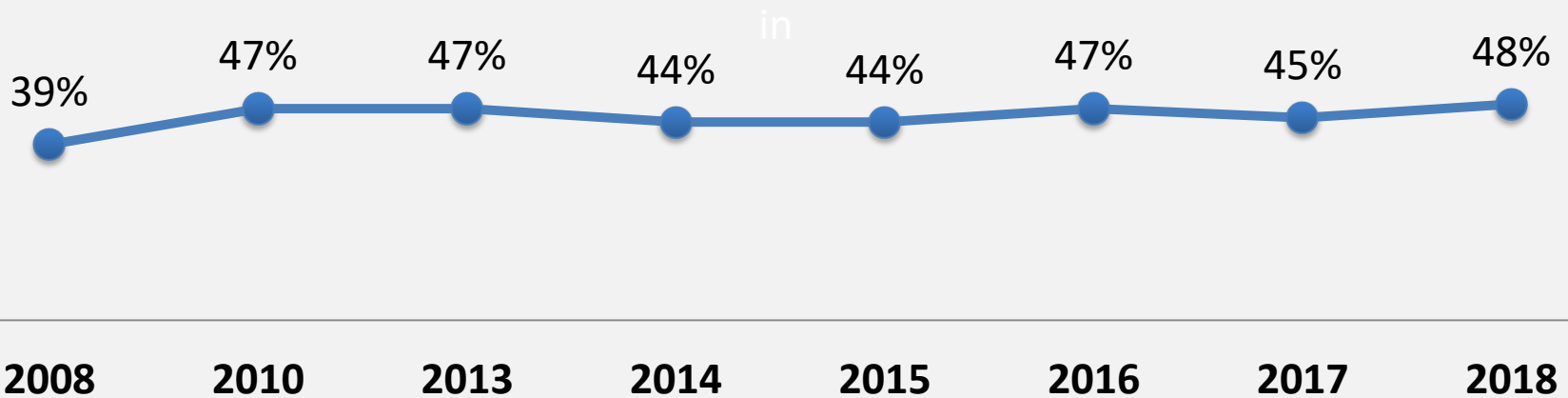
**Overall, awareness and engagement with 811 and call before you dig remain relatively consistent with historical findings.**

*While maintaining current levels is a success and shows the strength of CGA communications, programs, and partnerships, looking for new ways to increase awareness and engagement is a recommended next step as CGA continues to grow.*

## TREND DATA: AWARENESS OF CALL BEFORE YOU DIG SERVICES

- Almost half of respondents say they are aware of call before you dig services, increasing slightly to 48%, the highest point seen to-date.

AWARENESS OF CALL BEFORE YOU DIG SERVICES



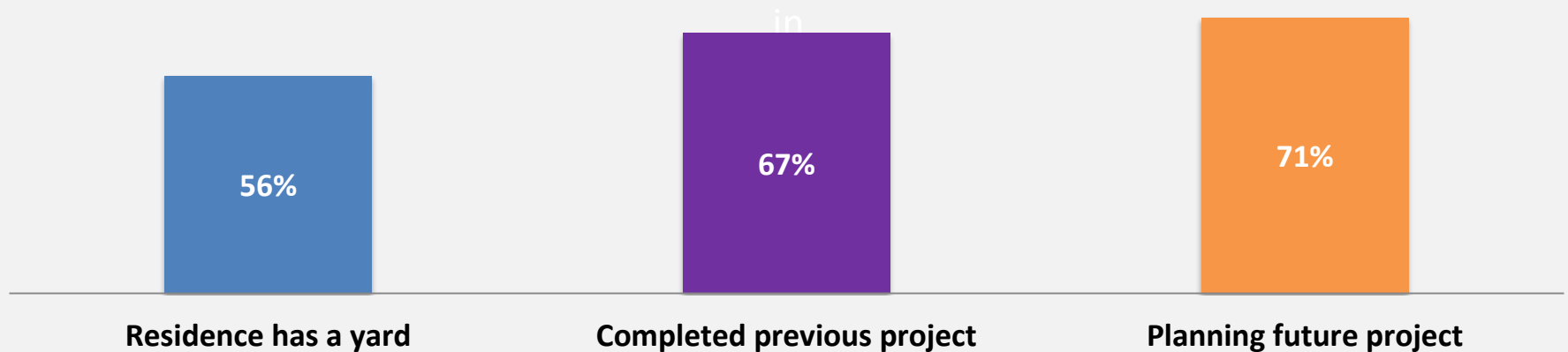
Q: Are you aware of a free national phone number that people can call to have underground utility lines on their property marked prior to starting any digging project?  
Base=Total sample (n=1805)

## A CLOSER LOOK AT ACTIVE DIGGERS: AWARENESS OF CALL BEFORE YOU DIG SERVICES

- Active diggers, those who have recently completed a project or are planning a future project, continue to show significantly higher awareness and engagement with call before you dig, scoring well above the national average.

### AWARENESS OF CALL BEFORE YOU DIG SERVICES-YES

**NATIONAL AVERAGE**  
48%



Q: Are you aware of a free national phone number that people can call to have underground utility lines on their property marked prior to starting any digging project?  
Base=Total sample (n=1805)

## A CLOSER LOOK AT AGE: AWARENESS OF CALL BEFORE YOU DIG SERVICES

- As seen previously, awareness of call before you dig increases with age.

AWARENESS OF CALL BEFORE YOU DIG SERVICES-YES

NATIONAL AVERAGE

48%

in

44%

18-34 years of age

47%

35-54 years of age

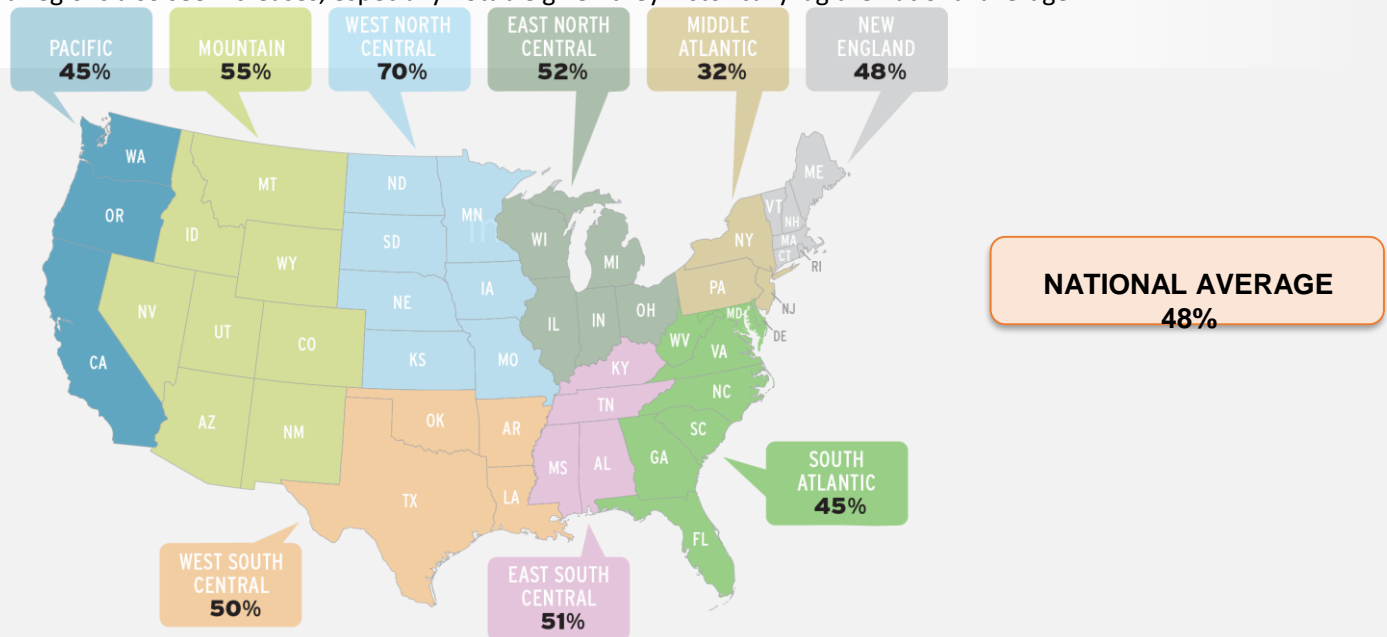
51%

55+ years of age

Q: Are you aware of a free national phone number that people can call to have underground utility lines on their property marked prior to starting any digging project?  
Base=Total sample (n=1805)

## A CLOSER LOOK AT REGION: AWARENESS OF CALL BEFORE YOU DIG SERVICES

- As in previous years, respondents in the West North Central region are most likely to be aware of call before you dig and increase 8-points in 2018.
- The Pacific and New England regions also see increases, especially notable given they historically lag the national average.



Q: Are you aware of a free national phone number that people can call to have underground utility lines on their property marked prior to starting any digging project?  
Base=Total sample (n=1805)

## A CLOSER LOOK AT MARKETING BUDGET: AWARENESS OF CALL BEFORE YOU DIG SERVICES

- When integrating data from the 2018 Survey of One Call Centers, a trend arose when looking at marketing budgets (first adjusting for the state population size). As marketing budgets increase, so does awareness of call before you dig.

### AWARENESS OF CALL BEFORE YOU DIG SERVICES-YES

**NATIONAL AVERAGE**

**48%**

in

**57%**

**42%**

**Above average marketing budget**

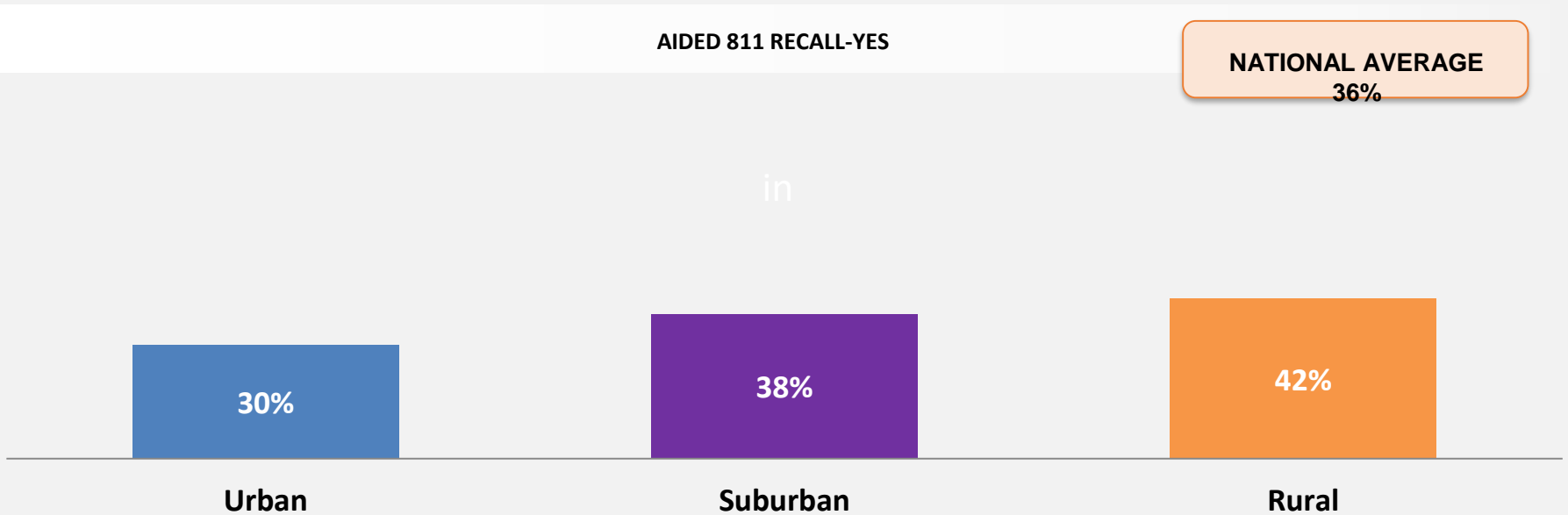
**Below average marketing budget**

Q: Are you aware of a free national phone number that people can call to have underground utility lines on their property marked prior to starting any digging project?  
Base=Total sample (n=1805)



## A CLOSER LOOK AT GEOGRAPHY: AIDED 811 RECALL

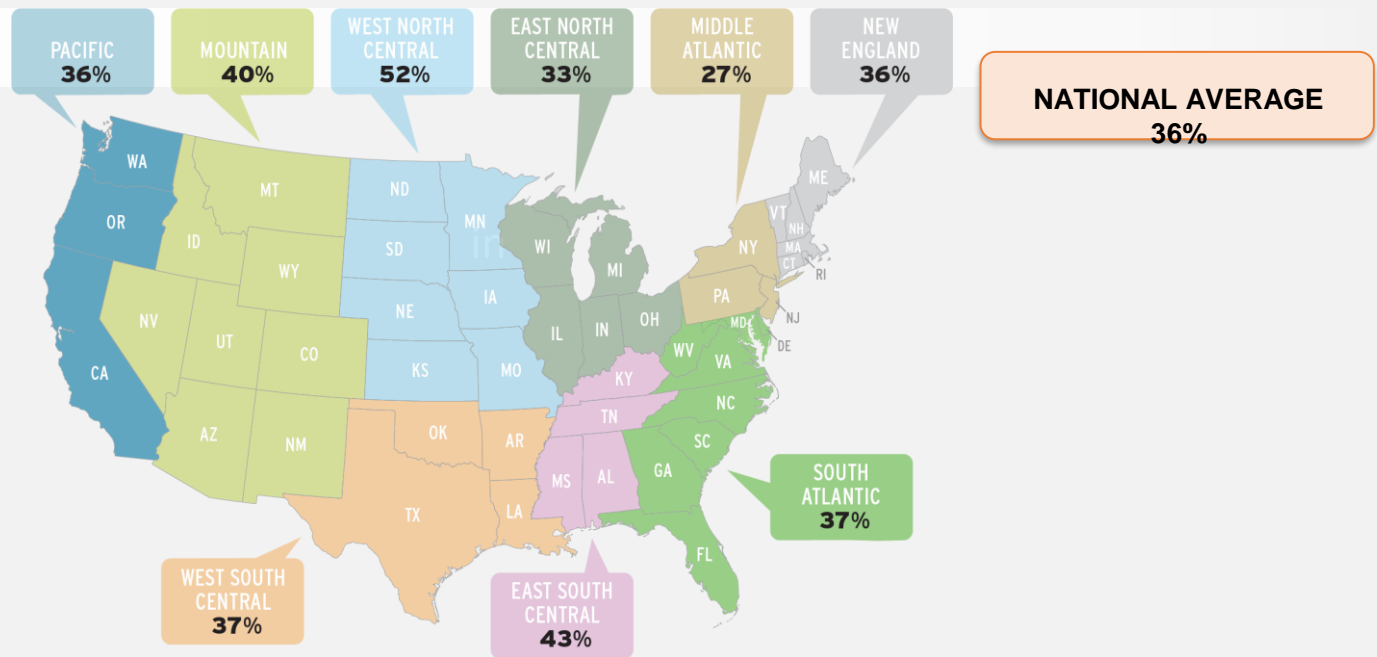
- Similar to awareness of call before you dig, rural and suburban respondents continue to drive awareness of 811



Q: Does the phone number "811" sound familiar? (Aided) Base=Total sample (n=1805)

## A CLOSER LOOK AT REGION: AIDED 811 RECALL

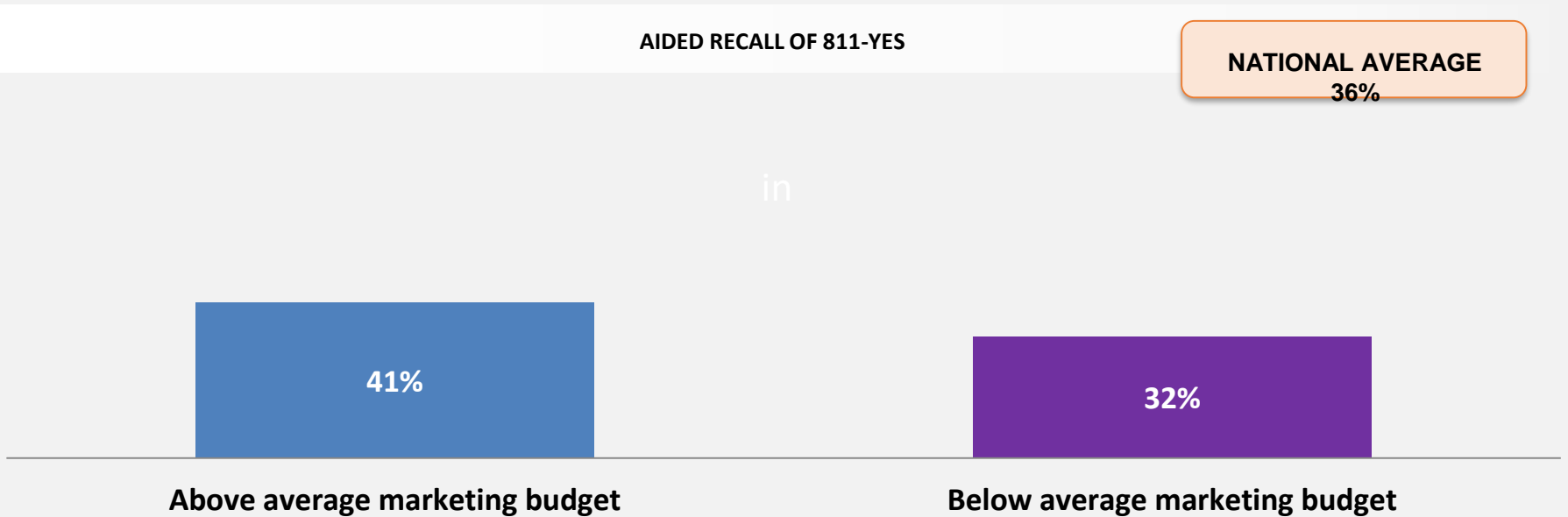
- The majority of regions saw a decrease in awareness of 811, most notably East North Central (-10-points), but the Pacific, New England, and West North Central saw increases.



Q: Does the phone number "811" sound familiar? (Aided) Base=Total sample (n=1805)

## A CLOSER LOOK AT MARKETING BUDGET: AIDED RECALL OF 811

- As seen with awareness of call before you dig, as marketing budgets increase so does awareness of 811.

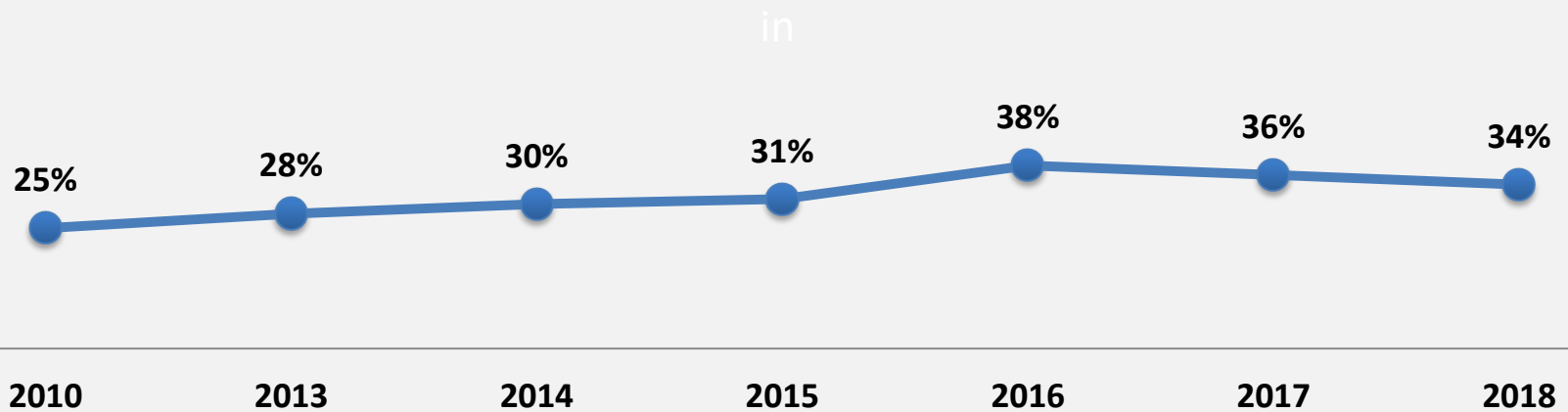


Q: Does the phone number "811" sound familiar? (Aided) Base=Total sample (n=1805)

## TREND DATA: AWARENESS OF 811 ADVERTISING

- Over one-third (34%) of respondents note they have seen or heard advertising that promotes the 811 service. While the decrease over the last year is within the margin of error, it is also important to note awareness also decreased in 2017. This is a figure to monitor closely.

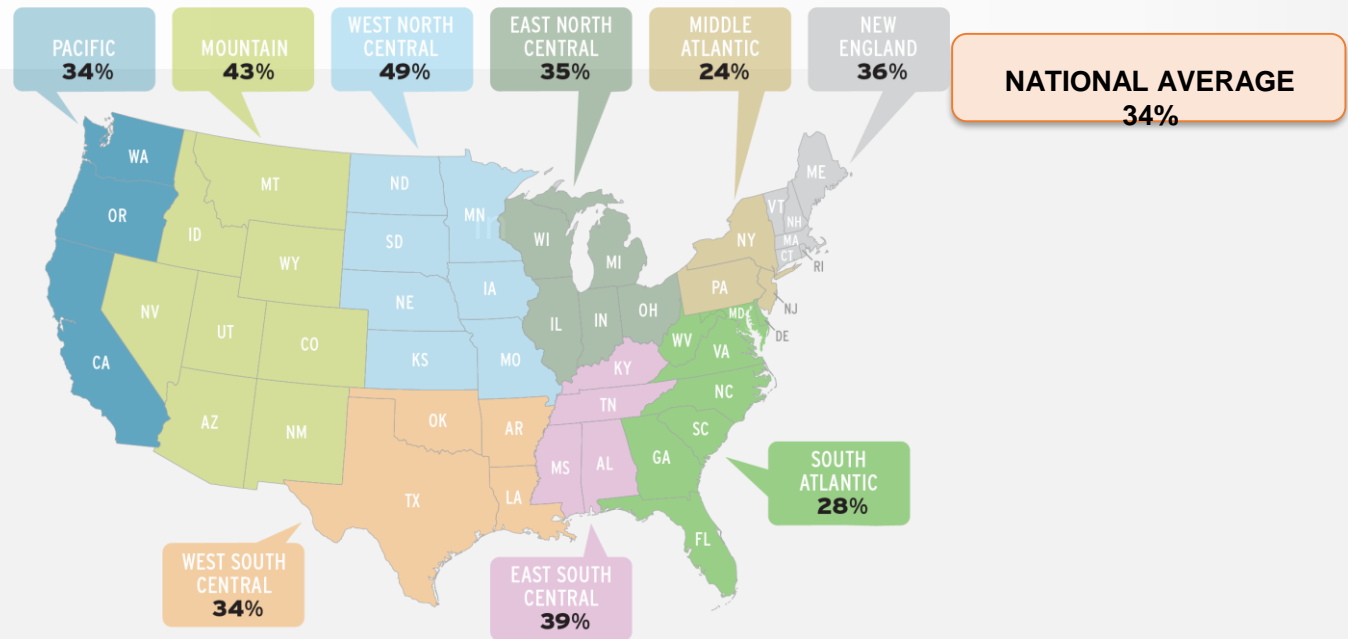
AWARENESS OF 811 ADVERTISING



Q: Have you seen or heard advertising that promotes the 811 service? Base=Total sample (n=1805)

## A CLOSER LOOK AT REGION: AWARENESS OF 811 ADVERTISING

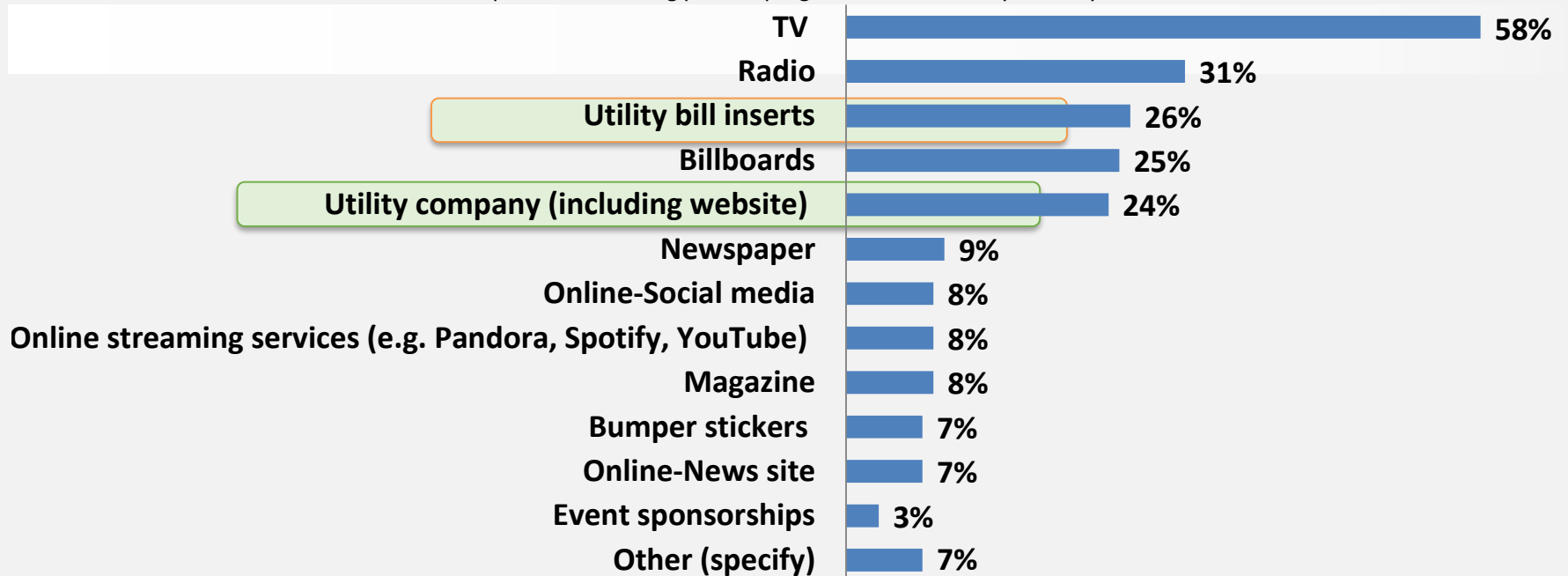
- The West North Central region remains highest for those who have seen or heard 811 advertising.
- The South Atlantic region decreases 5-points after decreasing 6-points in 2017. This is a region to watch in the coming year.



Q: Have you seen or heard advertising that promotes the 811 service? Base=Total sample (n=1805)

## WHERE DID YOU SEE OR HEAR ADVERTISEMENTS

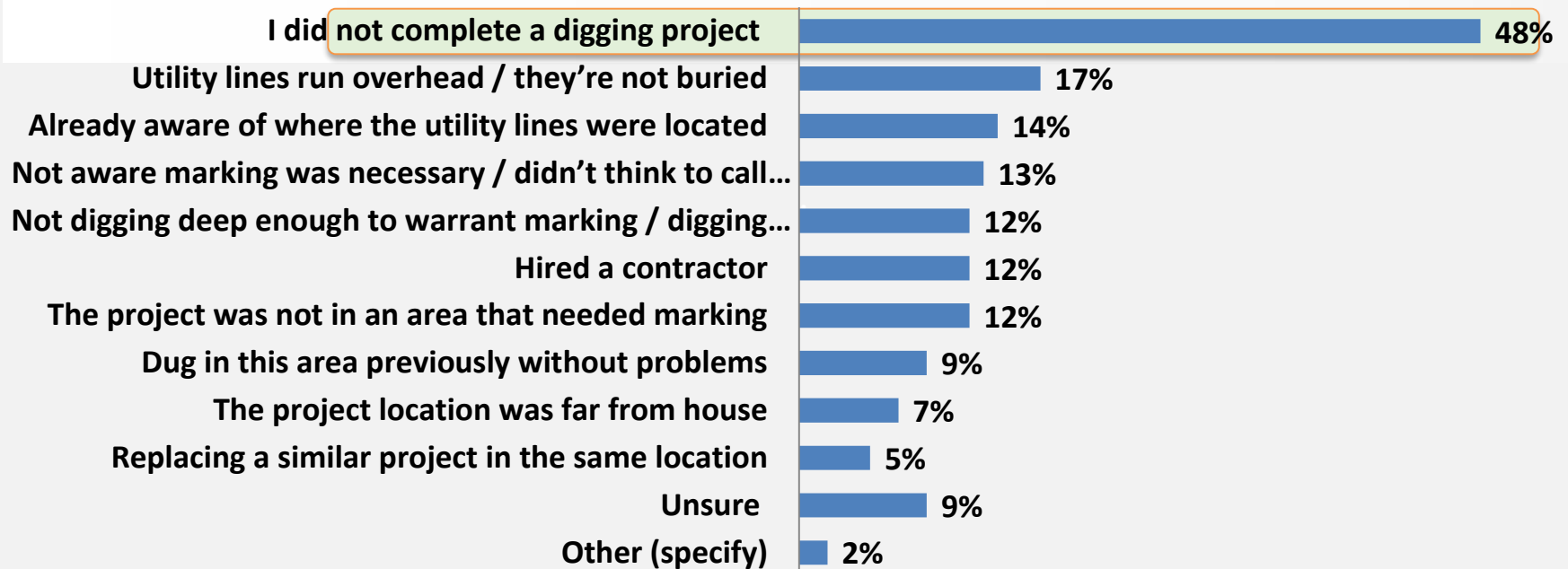
- A new question was added in 2018 to inquire where respondents had seen or heard the advertisements. TV (58%) and radio (31%) are the most common sources cited.
- Roughly one-quarter of respondents say they have seen 811 advertising in utility bill inserts (26%) and from utility companies (24%). This high level of awareness underscores the importance of strong partner programs with the utility industry.



Q: And, where specifically did you see or hear 811 advertising? (Select all that apply) Base=Those who have seen or heard advertisements (n=610)

## REASONS FOR NOT CONTACTING 811 OR CALL BEFORE YOU DIG

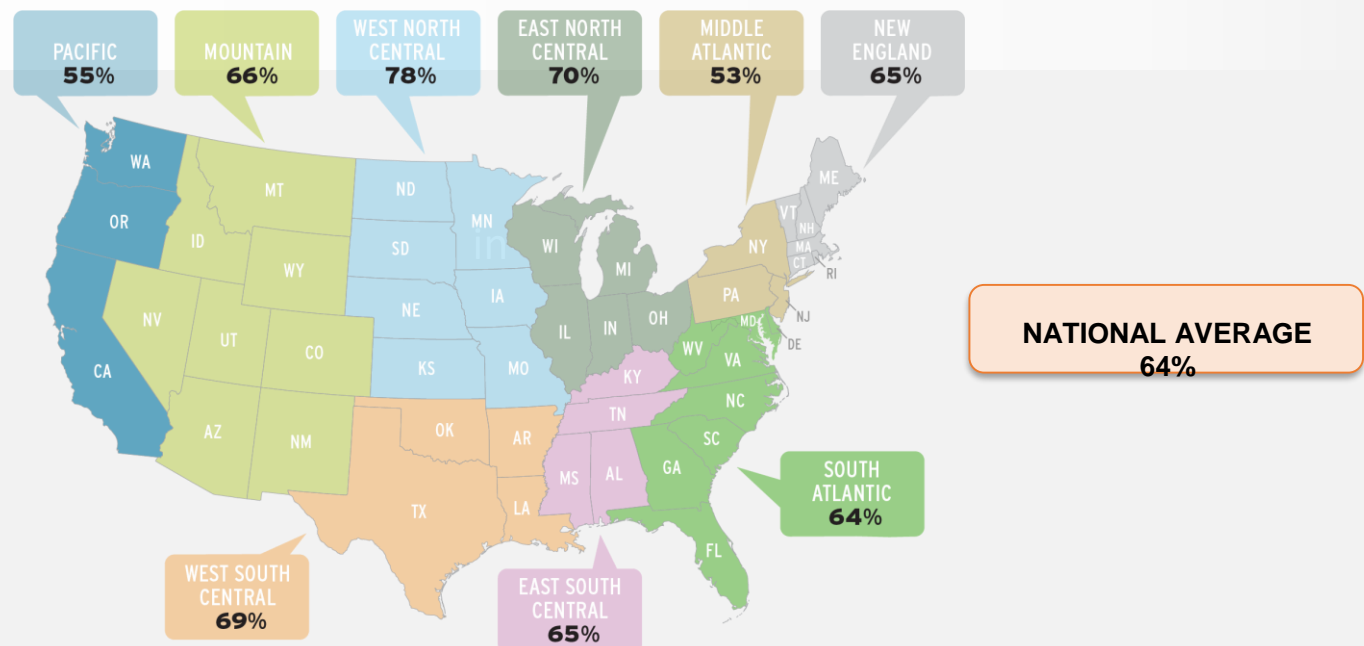
- To further explore usage rates of 811 and call before you dig services, a follow up question was asked of those who did not use either. The plurality of respondents indicate they simply did not complete a project (48%).
- While a variety of reasons are listed for not calling, continuing to focus on building awareness that marking is necessary is recommended.



Q: For which of the following reasons did you not call or go online to have the underground utility lines in your yard marked? (Select all that apply)  
Base=Those who have not used 811 or call before you dig in the past. (n=1368)

## A CLOSER LOOK AT REGION: LIKELIHOOD TO 811 IN THE FUTURE

- Over half of respondents in all nine census regions remain likely to contact 811 before starting future digging projects. This is highest among those in the West North Central region.



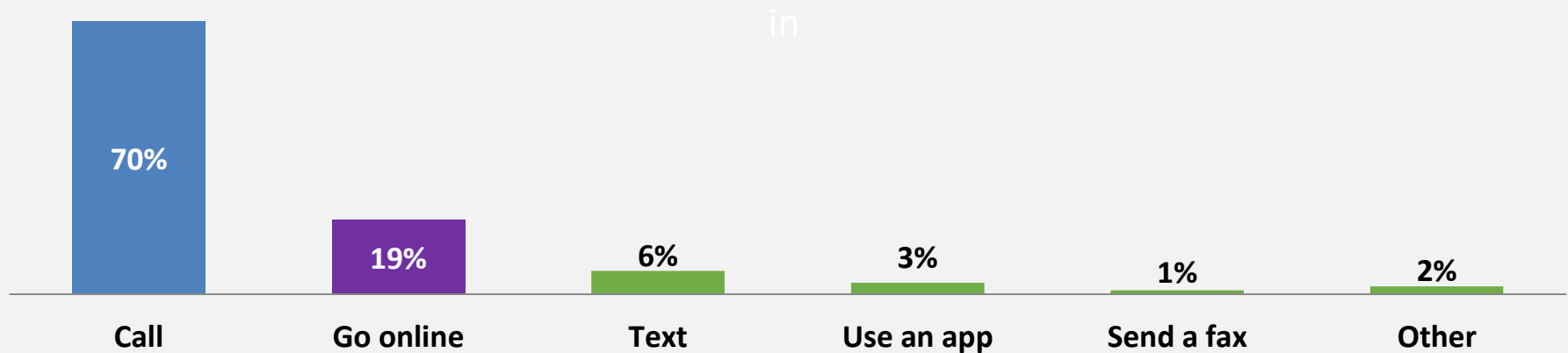
Q: In the future, how likely are you to contact 811 before starting a digging project? Base=Total Sample (n=1805)



## PREFERRED METHOD FOR 811

- The vast majority of respondents indicate they would “call” to contact 811 about a future digging project, however 19% say they would “go online”.
- It is interesting note, based on One Call Center survey data the majority of requests are electronic (56%), and only 39% come through voice. However, those figures also account for professional excavators.

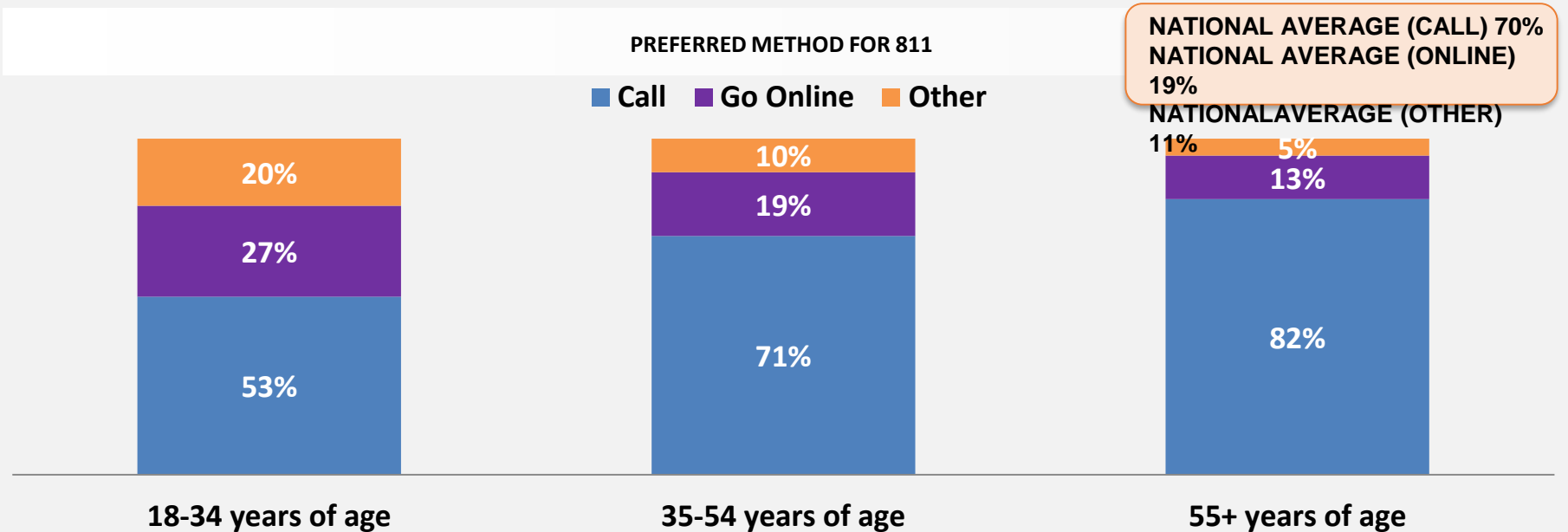
PREFERRED METHOD FOR 811



Q: Assuming you had an upcoming digging project and planned to reach out to 811 to have your utility lines marked, which of the following would be the best way for you to contact 811? Base=Total Sample (n=1805)

## A CLOSER LOOK AT AGE: PREFERRED METHOD FOR 811

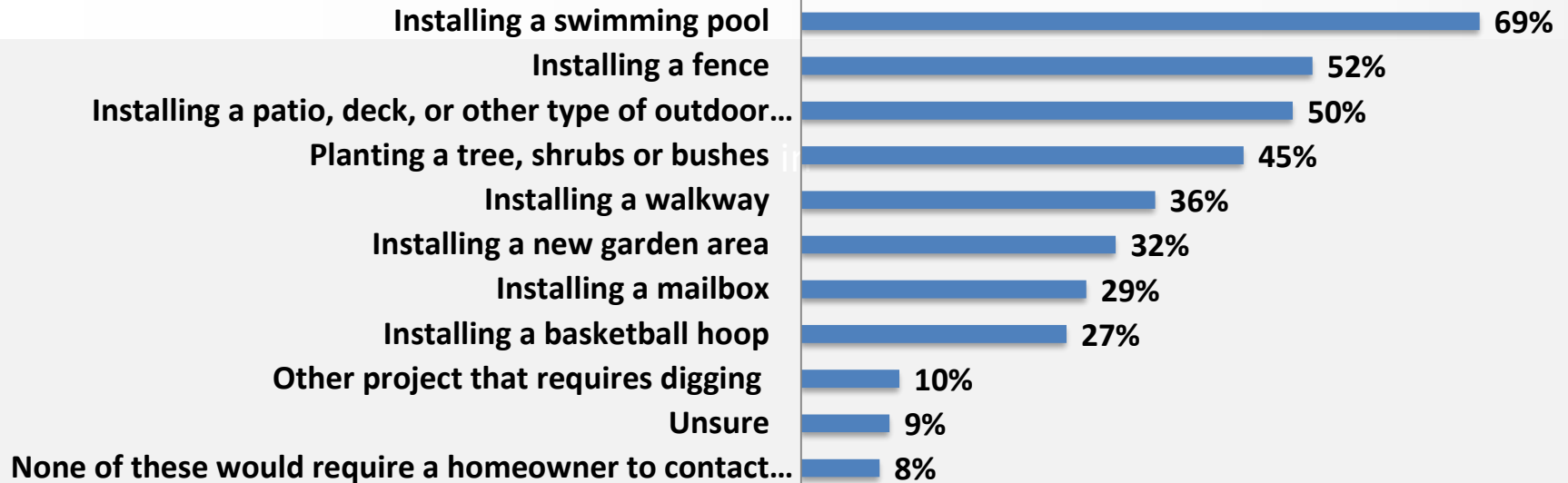
- The preferred method for 811 differs significantly among different age groups. While phone is still the preferred method of contact for a majority regardless of age, only 53% of those 18-34 say “call” versus 82% of those 55+.



Q: Assuming you had an upcoming digging project and planned to reach out to 811 to have your utility lines marked, which of the following would be the best way for you to contact 811? Base=Total Sample (n=1805)

## PROJECTS REQUIRING 811

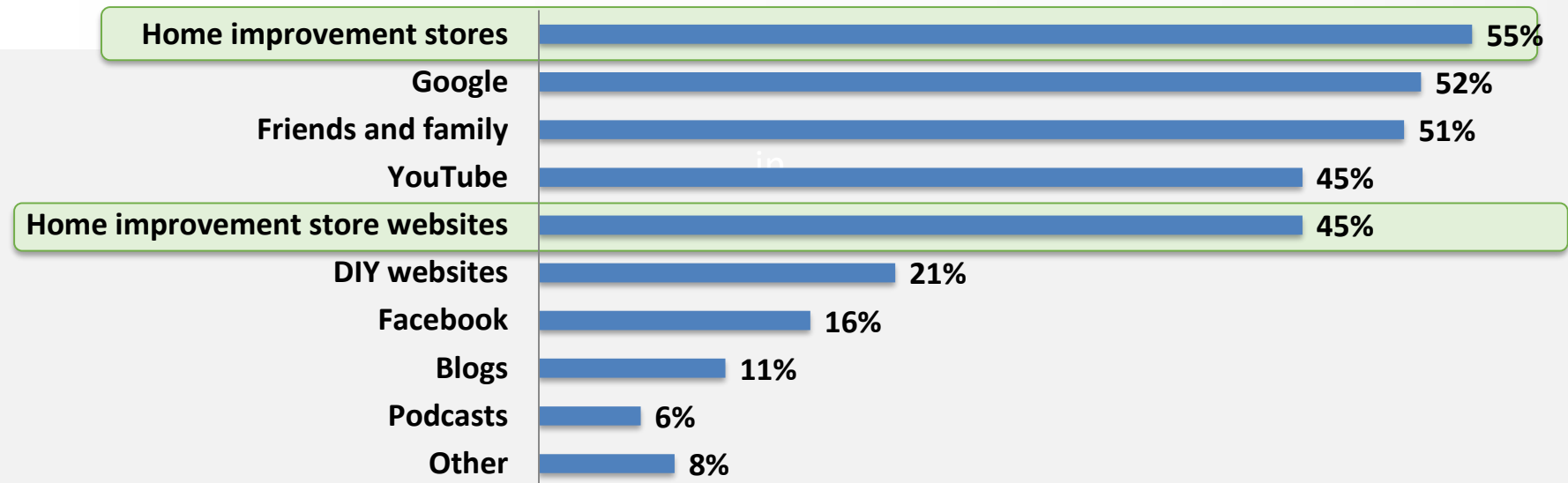
- While a majority of respondents indicate installing a swimming pool (69%) would require a homeowner to contact 811, significantly less say the same for installing a fence (52%), patio or deck (50%), or planting a tree, shrubs or bushes (45%). Continuing to communicate to homeowners the need to contact 811, regardless of the project size, is recommended.
- It is important to note that active diggers are more likely to believe all projects are more likely to need marking.



Q: Which of the following landscaping or home improvement projects do you feel would require that a homeowner contact 811? Base=Total Sample (n=1805)

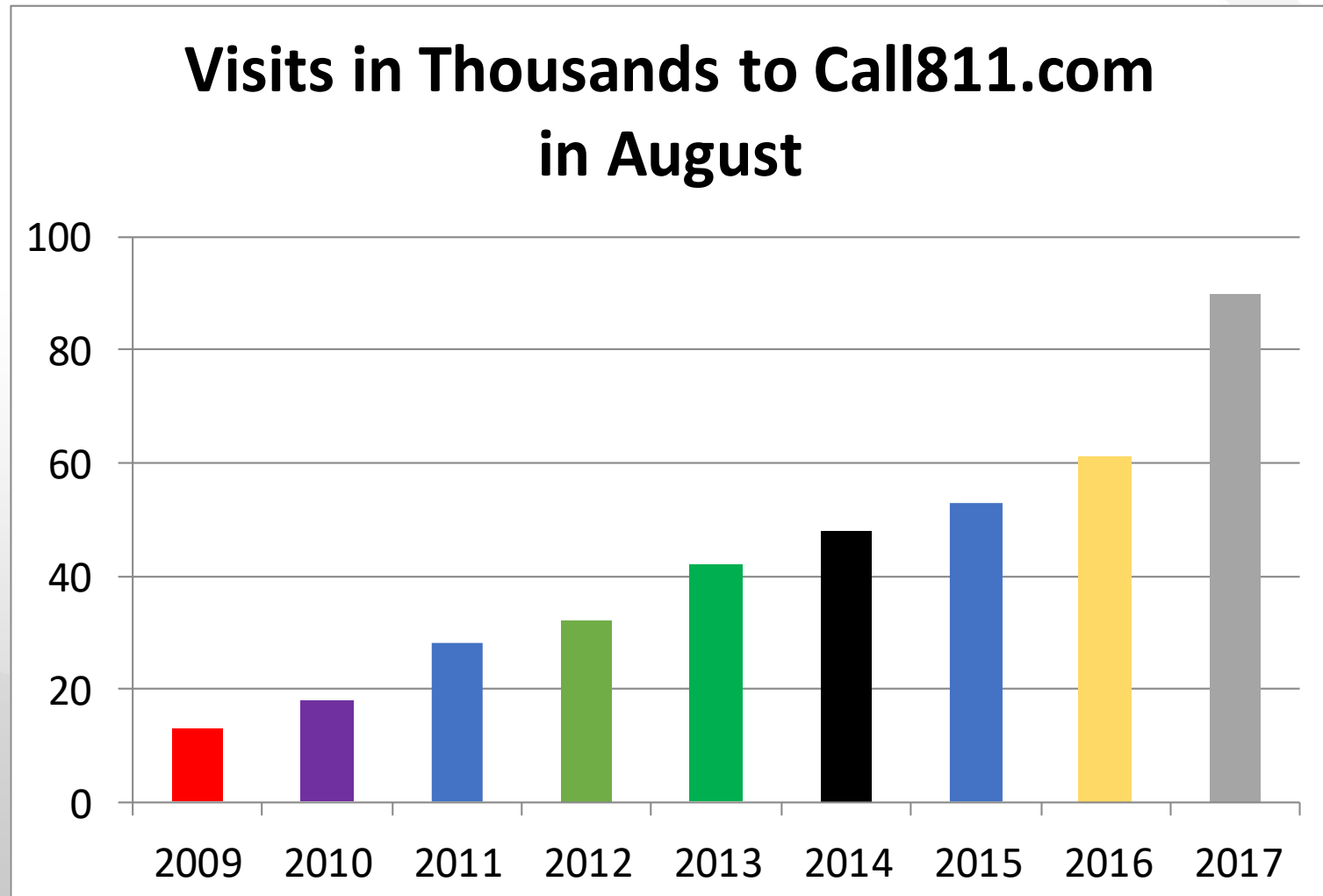
## INFORMATION SOURCES ON HOME IMPROVEMENT PROJECTS

- Home improvement stores (55%) are the primary resource for information on home improvement projects, continuing partnerships such as the one with Lowe's is recommended. Home improvement store websites (45%) are also a popular information source.
- Online resources such as Google (52%) and YouTube (45%) are also important information sources. Those who are planning a future project or recently completed a project are significantly more likely to turn to YouTube.



Q: Where would you turn to for information about outdoor home improvement projects? Base=Total Sample (n=1801)

# Increasing Education

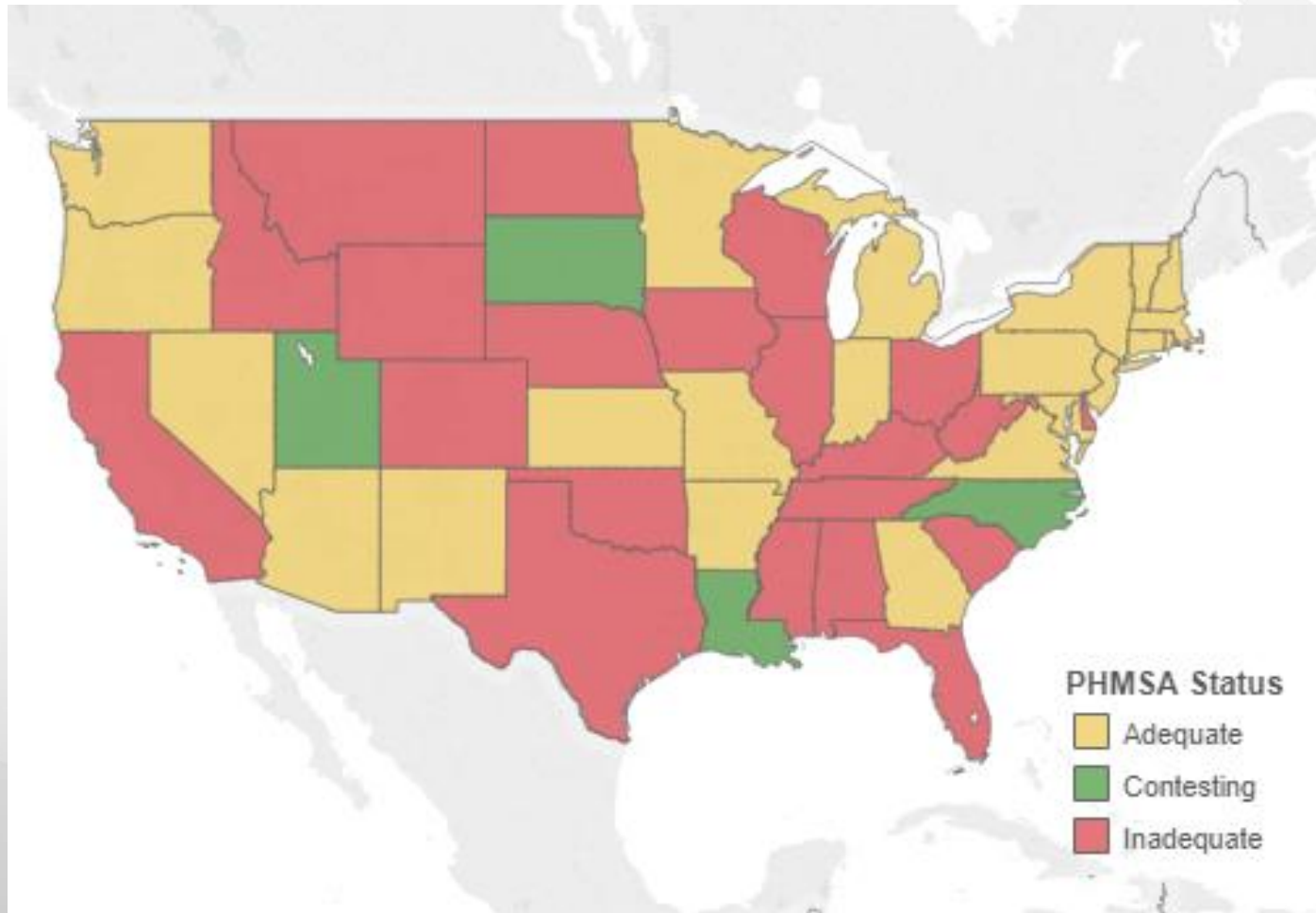


# Reducing Damages: Key Elements

- Increase awareness and use of 811.
  - Reduce obstacles to participation.
  - Address target audiences.
- Increase education of all stakeholders on the best practices.
- Grow data collected and submitted into DIRT across *all* core stakeholder groups.
- Strengthen balanced and effective enforcement across states.
- Identify and address gaps in technology.

# DIRT Interactive Dashboard

## PHMSA Adequacy of One Call Law Enforcement Programs



# CGA's Social Networks

- Call 811 on Facebook:  
[www.facebook.com/Call811](http://www.facebook.com/Call811)
- CGA Connect on Facebook:  
[www.facebook.com/CGAConnect](http://www.facebook.com/CGAConnect)
- CGA Connect on Twitter:  
[www.twitter.com/CGAConnect](http://www.twitter.com/CGAConnect)





**Khrysanne Kerr**

**Vice President of Communications**

Direct: 330-283-3760

Email: [kerr@commongroundalliance.com](mailto:kerr@commongroundalliance.com)